

WHAT IS CLAIMED IS:

1. A communicating method in a network in which a feed and receivers are connected via a unidirectional line and the feed and the receivers are respectively  
5 connected to a bidirectional line via routers, comprising the steps of:

allowing a first router to transmit a first packet including path control information to a first receiver;

10 allowing said first receiver to transmit a second packet obtained by capsulating said first packet to a first interface of said feed via said first router, said bidirectional line, and a second router;

15 allowing said feed to extract said first packet by decapsulating said second packet, transmit said first packet to said second router from a second interface, and transmit said first packet to a third receiver from a third interface via said unidirectional line; and

20 allowing said third receiver to transmit said first packet to a third router.

2. A method according to claim 1, further comprising the step of performing communication between  
25 said feed and said receiver via a communication path established according to said path information.

3. A method according to claim 1, wherein said first and second packets are IP packets.

4. A method according to claim 1, wherein said unidirectional line is a satellite line.

5. A transmitting apparatus having first, second, and third interfaces, wherein the transmitting apparatus:

is connected to a first interface of a router via said first interface and a bidirectional line;

is connected to a second interface of the router via said second interface and said bidirectional line;

is connected to a receiver via said third interface and a unidirectional line;

receives a capsulated packet including path control information via said bidirectional line, said router, and said first interface from said receiver;

decapsulates said capsulated packet,  
transmits said path control information extracted due  
to the decapsulation to said router via said second  
interface and said bidirectional line, and transmits  
said path control information to the receiver via said  
third interface and said unidirectional line.

6. A receiving apparatus having first and second

interfaces, wherein the receiving apparatus:

is connected to a feed via said first interface and a unidirectional line;

is connected to a bidirectional line via said second interface and a router;

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        receives a packet including path control
information from said router via said second interface;

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capsulates the received packet and transmits the encapsulated packet to said feed via said second interface, said router, and said bidirectional line; and

receives path information from said feed via  
said unidirectional line and said first interface.

7. An apparatus according to claim 5 or 6,  
wherein said packet is an IP packet.

8. An apparatus according to claim 5 or 6,  
wherein said unidirectional line is a satellite line.